

### **REMARKS**

By this amendment, claim 1 has been amended, and claims 11 and 12 have been canceled without prejudice or disclaimer. Accordingly, claims 1, 3, 4, and 8-10 are currently pending in the application, of which claim 1 is independent.

Applicants respectfully submit that the above amendments do not add new matter to the application and are fully supported by the specification.

In view of the above amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections for the reasons discussed below.

#### ***Rejections Under 35 U.S.C. § 112, first paragraph***

Claims 1, 3, 4, and 8-12 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement.

Claim 1 has been amended for clarification. Applicants respectfully submit that claim 1, as amended, fully complies with the requirements of 35 U.S.C. § 112, first paragraph.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 112, first paragraph rejection of claims 1, 3, 4, and 8-12.

#### ***Rejections Under 35 U.S.C. § 103***

Claims 1, 3, 4, and 8-11 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Japanese Patent Application Publication No. 11-273731 applied for by Naoki ("Naoki") in view of International Patent Application Publication No. 02/40404 applied for by Ueda ("Ueda").

To establish an obviousness rejection under 35 U.S.C. § 103(a), four factual inquiries must be examined. The four factual inquiries include (a) determining the scope and contents of

the prior art; (b) ascertaining the differences between the prior art and the claims in issue; (c) resolving the level of ordinary skill in the pertinent art; and (d) evaluating evidence of secondary consideration. *Graham v. John Deere*, 383 U.S. 1, 17-18 (1966). In view of these four factors, the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and should "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l. Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385, 1396 (2007). Furthermore, even if the prior art may be combined, the combination must disclose or suggest all of the claim limitations. See *in re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Assuming *arguendo* that the prior art elements could be combined, the combined prior art elements do not disclose or suggest every claimed feature.

Amended claim 1 recites, *inter alia*:

wherein the linear polymer having P=O bonds is formed of a polymerized phosphonate compound with a polymerizable functional unsaturated hydrocarbon group, and  
wherein the phosphonate compound with the unsaturated hydrocarbon group is at least one selected from the group consisting of allyl diethylphosphonoacetate  $(C_2H_5O)_2P(O)CH_2CO_2CH_2CH=CH_2$ , triethyl 3-methyl-4-phosphonocrotonate  $(C_2H_5O)_2P(O)CH_2C(CH_3)-CHCO_2C_2H_5$ , and allyl tetraisopropylphosphonodiamidite  $([CH_3]_2CH)_2N)_2POCH_2CH=CH_2$

Naoki in view of Ueda fails to teach or suggest at least such features.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claim 1. Claims 3, 4, and 8-10 depend from claim 1 and are allowable at least for this reason. Since none of the other prior art of record discloses or suggests all the features of the claimed invention, Applicants respectfully submit that independent claim 1, and all the claims that depend therefrom, are allowable.

Claims 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Naoki in view of Ueda, and further in view of U.S. Patent Application Publication No. 2002/0177027 applied for by Yeager, *et al.* ("Yeager").

Amended claim 1, which includes features from canceled claims 11 and 12, recites, *inter alia*:

wherein the linear polymer having P=O bonds is formed of a polymerized phosphonate compound with a polymerizable functional unsaturated hydrocarbon group, and wherein the phosphonate compound with the unsaturated hydrocarbon group is at least one selected from the group consisting of allyl diethylphosphonoacetate  $(C_2H_5O)_2P(O)CH_2CO_2CH_2CH=CH_2$ , triethyl 3-methyl-4-phosphonocrotonate  $(C_2H_5O)_2P(O)CH_2C(CH_3)-CHCO_2C_2H_5$ , and allyl tetraisopropylphosphonodiamidite  $([(CH_3)_2CH]_2N)_2POCH_2CH=CH_2$

Naoki in view of Ueda and Yeager fails to teach or suggest at least such features.

Rather, Yeager discloses diethylvinylphosphonate (paragraph [0071]).

**CONCLUSION**

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

/hae-chan park/

Hae-Chan Park  
Reg. No. 50,114

Date: June 18, 2009

**CUSTOMER NUMBER: 58027**

H.C. Park & Associates, PLC  
8500 Leesburg Pike  
Suite 7500  
Vienna, VA 22182  
Tel: 703-288-5105  
Fax: 703-288-5139  
HCP:YYK/ebs